

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
12 May 2005 (12.05.2005)

PCT

(10) International Publication Number  
**WO 2005/042306 A2**

- (51) International Patent Classification<sup>7</sup>: **B60R**
- (21) International Application Number:  
PCT/US2004/035017
- (22) International Filing Date: 22 October 2004 (22.10.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
60/513,644 23 October 2003 (23.10.2003) US
- (71) Applicant (for all designated States except US): **DELPHI TECHNOLOGIES, INC.** [US/US]; P.O. Box 5052, Mail code 480-410-202, Troy, MI 48007-5052 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **BRANDL, Michael, C.** [US/US]; 461 Jennifer Lane, Grayslake, IL 60030 (US). **BARTHEL, Richard, C.** [US/US]; 33030 N. River Road, Libertyville, IL 60048 (US). **NOVELLE, Anthony, J.** [US/US]; 120 Newton Avenue, Glen Ellyn, IL 60137 (US).
- (74) Agent: **WOOD, David, P.**; Delphi Technologies, Inc., P.O. Box 5052, Legal Staff-M/C 480-410-202, Troy, MI 48007-5052 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

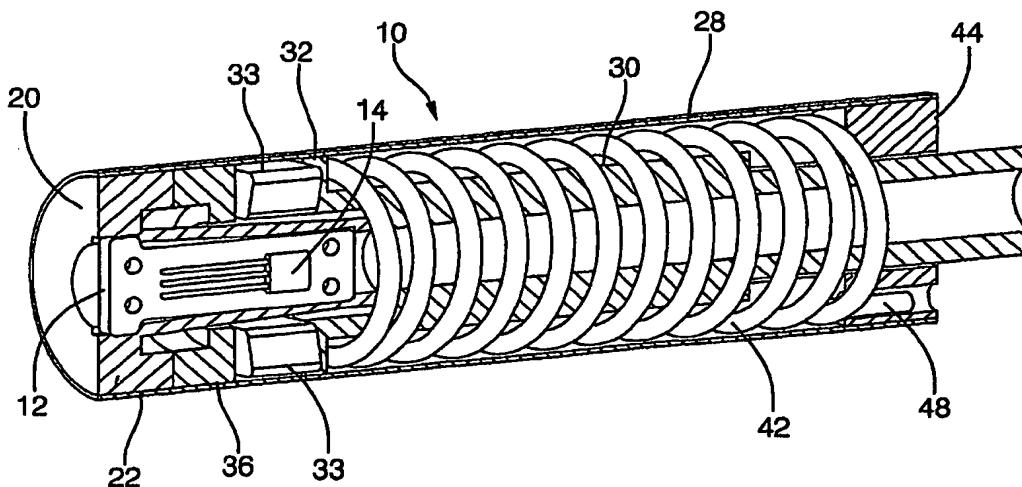
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished upon receipt of that report

[Continued on next page]

(54) Title: CONTROL CARTRIDGE AND CONTROL HANDLE INCLUDING SAME



(57) Abstract: A control cartridge has a circuit board that includes a Hall effect sensor, the position of which is fixed in a housing that has a cam. The control cartridge includes a shaft that carries a magnet and that rotates and translates with respect to the housing. The shaft has a cam follower that engages the cam and translates the shaft with respect to the housing when the shaft is rotated with respect to the housing in one direction but not in an opposite direction. The control cartridge is shown as part of a control handle for a motorcycle in which the relative angular position of the shaft with respect to the Hall effect sensor is used to control engine speed manually while the relative axial position of the shaft with respect to the Hall effect sensor is used to deactivate a cruise control.

WO 2005/042306 A2

10/3  
U.S. Appl. No. 10/575504 **DO/US WORKSHEET** Internatio Appl No. US04/035017

Application filed by: ☐ 20 months ☒ 30 months

**INTERNATIONAL APPLICATION PAPERS IN THE APPLICATION FILE:**

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> International application (RECORD COPY)            | <input type="checkbox"/> Request form PCT/RO/101                        |
| <input type="checkbox"/> Article 19 amendments   | <input type="checkbox"/> PCT/IB/302                                     |
| <input type="checkbox"/> PCT/IB/331  | <input checked="" type="checkbox"/> PCT/ISA/210-Search Report 24 Jun 06 |
| <input type="checkbox"/> PCT/IPEA/409 IPER (PCT/IPEA/416 on front)                     | <input type="checkbox"/> Search Report references                       |
| <input type="checkbox"/> Annexes to 409  | <input type="checkbox"/> Other _____                                    |
| <input checked="" type="checkbox"/> Priority document(s) No. <u>1</u>                  |   |
| <input type="checkbox"/> INTERNATIONAL APPLICATION ON DOUBLE SIDED PAPER (COPIES MADE) |   |

**RECEIPTS FROM THE APPLICANT: (other than checked above)**

- |   |   |
|---|---|
| <input checked="" type="checkbox"/> Basic National Fee (paid or authorized to charge) | <input type="checkbox"/> Preliminary amendment(s) filed                       |
| Translation of international application as filed:                                    |   |
| <input checked="" type="checkbox"/> Description                                       | <input checked="" type="checkbox"/> Information Disclosure Statement 07-05-06 |
| <input checked="" type="checkbox"/> Claims  | <input type="checkbox"/> Assignment document                                  |
| <input checked="" type="checkbox"/> Words in the drawing figure(s)                    | <input type="checkbox"/> Power of attorney/Change of address                  |
| <input type="checkbox"/> Article 19 amendments  | <input type="checkbox"/> Substitute specification                             |
| <input type="checkbox"/> Annexes to 409   | <input type="checkbox"/> Verified small status claim                          |
| <input checked="" type="checkbox"/> Oath / Declaration <u>Not Executed</u>            | <input type="checkbox"/> Other _____  |
| <input type="checkbox"/> DNA diskette   |   |

Notes: Use IA from IB.

No data sheet filed.

**35 U.S.C. 371 - Receipt of Request (PTO-1390)**

Date acceptable oath / declaration received

11 April 2006

Date complete 35 U.S.C 371 requirements met

02 April 2007

102(e) Date

Date of completion of DO/EO 906 - Notification of Missing 102(e) Requirements

Date of completion of DO/EO 907 - Notification of Acceptance for 102(e) date

Date of completion of DO/EO 911 - Application accepted under 35 U.S.C. 1.11

Date of completion of DO/EO 905 - Notification of Missing Requirements

22 Mar 2007

Date of completion of DO/EO 916 - Notification of Defective Response

Date of completion of DO/EO 903 - Notification of Acceptance

02 May 2007

Date of completion of DO/EO 909 - Notification of Abandonment

**WIPO Publication**  
Publication No.

WO05/042306A2

Publication Date

12 May 05

Publication Language

English

Not Published

☒ U.S. only

Designated

☐ EP request

Screening done by: SA

22851

**BEST AVAILABLE COPY**